ABSTRACT OF THE DISCLOSURE

A method for modeling an implant to be applied to a defect of a bone comprises the steps of obtaining a plurality of tomographic image data of the bone based on measurement data by MRI, producing three-dimensional image data of the bone based on the plurality of tomographic image data, and estimating a shape of a missing born that was previously present or should have been present in the defect of the bone to obtain three-dimensional data of the implant. The estimating step comprises the steps of estimating a provisional shape of the implant which has a contour conformable with the shape of a contour of periphery of the side walls of the defect at the distal surface of the bone and has a predetermined thickness; and deleting data of portions of the provisional shape of the implant that overlap the bone from the data of the provisional shape of the implant so that the three-dimensional data of the implant has an outer peripheral shape that is conformable with the shape of the side walls of the defect.